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CLAIMS

- 1 Apparatus for measuring the condition of fruit and vegetables comprising plunger means movable into and out of contact with a surface of an item of fruit or vegetable, said plunger means carrying a transducer which is brought into contact with an item of fruit or vegetables, the transducer reacting to a property of said fruit or vegetables to produce an output signal related to that property characterised in that at least a part of said plunger means or transducer which contacts said item of fruit or vegetables is of generally curved shape.
- 2 Apparatus according to claim 1 mounted in a resilient bellows assembly, said bellows assembly being capable of expansion under the action of pressurised air to bring the transducer into contact with a fruit or vegetable surface for measurement, and retraction by the application of a vacuum to move the transducer away from the fruit or vegetable surface.
- 3 Apparatus according to claim 1 or claim 2 wherein the transducer comprises an active transducer.
- 4 Apparatus according to claim 3 wherein the transducer comprises a piezoelectric sensor.
- 5 Apparatus according to any one of claims 1 to 4 wherein the transducer is generally hemispherical in shape at least at the part thereof which contacts the fruit or vegetable surface.

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6 Apparatus according to claim 1 wherein the plunger means comprises a housing within which is mounted a slug which carries said transducer wherein said slug is movable in said housing against the bias of a biasing member.

5 7 Apparatus according to claim 6 wherein the biasing means comprises a spring

8 Apparatus according to claim 6 or 7 wherein movement of said slug in said housing is additionally damped by a damping member.

9 Apparatus according to any one of claims 6 to 8 wherein said 10 transducer is electrically connected to external circuitry by an electrical connection and said electrical connection is associated with or disposed within said damping member.